Student Financial Assistance

System Acquisition Planning

Process Guide

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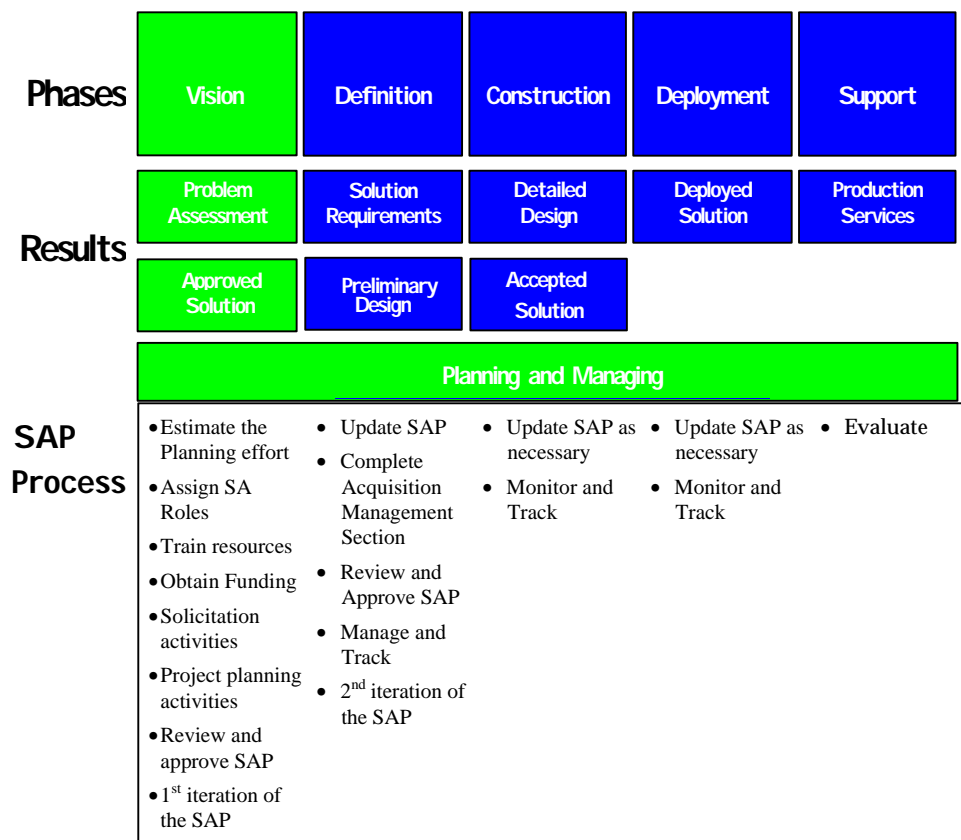
1.0   Introduction

The purpose of system acquisition planning is to ensure that reasonable planning for the system acquisition is conducted and that all elements of the project are included.
System acquisition planning involves the preparation for software-related areas in system level planning such as early budgetary action, schedule determination, acquisition strategy, risk identification, and software requirements definition. There are other traditional system acquisition planning activities that must be performed in the context of the system as a whole and in coordination with the project team (e.g., system requirements development, hardware/software partitioning, system level software requirements allocation, and solicitation management).

System acquisition planning also involves planning all aspects of the system acquisition project. System acquisition planning documentation provides for implementation of all system acquisition-related policies. System acquisition planning begins with the earliest identification of a role for software in the system to be acquired. The process starts when reasonable resources are assigned to form a project team for the acquisition, independent of whether or not the team is formally constituted as an organizational entity. System acquisition planning provides for conducting and documenting software acquisition planning activities and participation in system level planning activities as appropriate.

1.1   Overview of system acquisition planning and the SDLC

System acquisition planning is performed throughout the (SDLC). The diagram below highlights where the system acquisition planning activities are performed in the SDLC.

Phases	Vision	Definition	Construction	Deployment	Support
Results	Problem Assessment	Solution Requirements	Detailed Design	Deployed Solution	Production Services
	Approved Solution	Preliminary Design	Accepted Solution		

	Planning and Managing				
SAP Process	• Estimate the Planning effort • Assign SA Roles • Train resources • Obtain Funding • Solicitation activities • Project planning activities • Review and approve SAP • 1st iteration of the SAP	• Update SAP • Complete Acquisition Management Section • Review and Approve SAP • Manage and Track • 2nd iteration of the SAP	• Update SAP as necessary • Monitor and Track	• Update SAP as necessary • Monitor and Track	• Evaluate

2.0   System Acquisition Planning Process

2.1   Purpose

System acquisition planning's purpose is to ensure that reasonable planning for the system acquisition is conducted and that all elements of the project are included. The goal of system acquisition planning is that planning documents are prepared during the Vision and Definition Phase of the SDLC and maintained throughout the SDLC. The planning document must address the project's entire acquisition life cycle.

2.2   Process Definition

The system acquisition process begins at the beginning of the Vision Phase. There is no required input to the process. The entry criteria must include that an IT business need has been identified. Once the need has been identified, the acquiring organization begins the acquisition planning process. The system acquisition plan documents or refers to each of the steps involved in planning the acquisition. The outputs of the process include a completed system acquisition plan. The exit criterion is a completed and approved system acquisition plan that is used to manage the acquisition.

2.3   Benefits

System acquisition planning delivers a comprehensive, documented, defined process that can be measured, maintained, and repeated over the project life cycle. The outcomes meet SFA's Continuous Process Improvement objectives by employing processes adept at documenting and capturing estimates and actual results, all of which empower SFA to meet its strategic goals.

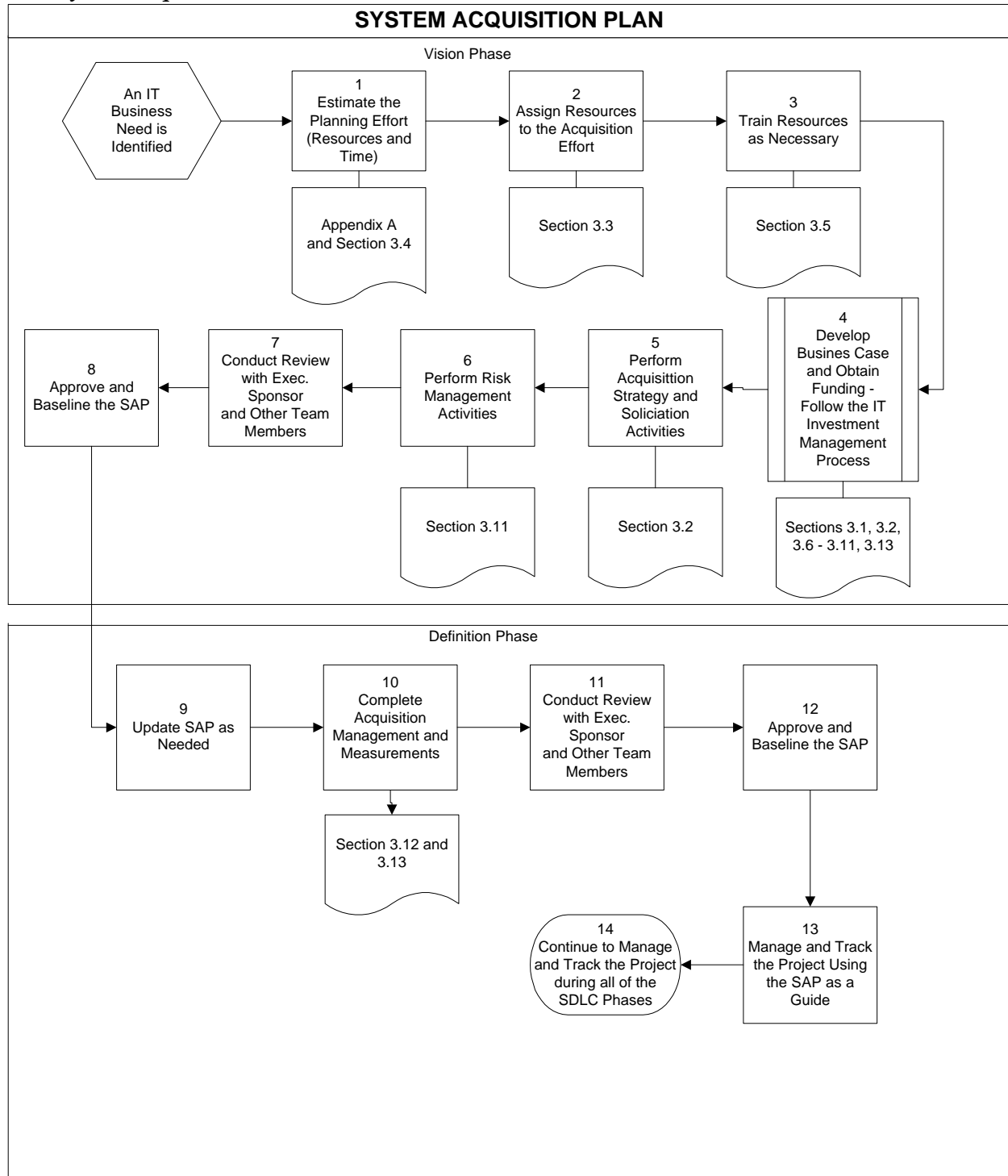The benefits of System Acquisition Planning include:
- Streamlined, predictable, repeatable, measurable processes that help SFA meet the Performance Objective:
  - Increased Customer Satisfaction
  - Increased Employee Satisfaction
  - Reduce Unit
- Higher quality work by using appropriate processes
- Lower cost by using repeatable processes
- System acquisition projects that have measurable success criteria
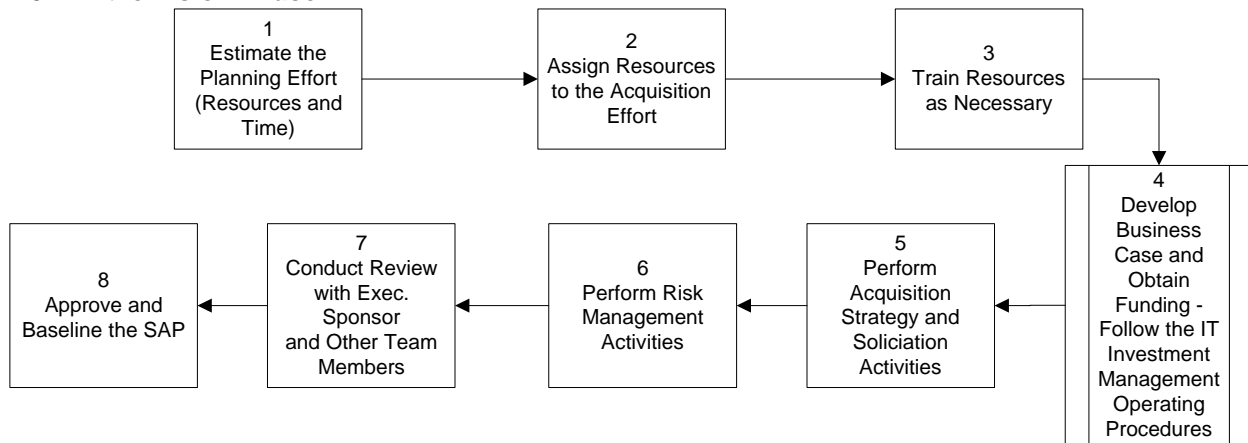
2.4   Process Flow

The system acquisition plan is the overlying document for all of the current Vision Phase and Definition Phase processes. Refer to the following diagram for further explanation.

2.4.1 System Acquisition Process Flow Overview

SYSTEM ACQUISITION PLAN

Vision Phase

An IT Business Need is Identified

1 — Estimate the Planning Effort (Resources and Time) — Appendix A and Section 3.4

2 — Assign Resources to the Acquisition Effort — Section 3.3

3 — Train Resources as Necessary — Section 3.5

4 — Develop Busines Case and Obtain Funding - Follow the IT Investment Management Process — Sections 3.1, 3.2, 3.6 - 3.11, 3.13

5 — Perform Acquisittion Strategy and Soliciation Activities — Section 3.2

6 — Perform Risk Management Activities — Section 3.11

7 — Conduct Review with Exec. Sponsor and Other Team Members

8 — Approve and Baseline the SAP

Definition Phase

9 — Update SAP as Needed

10 — Complete Acquisition Management and Measurements — Section 3.12 and 3.13

11 — Conduct Review with Exec. Sponsor and Other Team Members

12 — Approve and Baseline the SAP

13 — Manage and Track the Project Using the SAP as a Guide

14 — Continue to Manage and Track the Project during all of the SDLC Phases

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2.5 Process Steps

2.5.1 In the Vision Phase

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┌──────────────┐     ┌──────────────┐     ┌──────────────┐
│      1       │     │      2       │     │      3       │
│ Estimate the │     │Assign Resources│   │Train Resources│
│Planning Effort├────▶│to the Acquisition├──▶│as Necessary  │
│(Resources and│     │    Effort    │     │              │
│    Time)     │     │              │     │              │
└──────────────┘     └──────────────┘     └──────┬───────┘
                                                  │
                                                  ▼
┌──────────────┐  ┌──────────────┐  ┌──────────┐  ┌──────────────┐
│      8       │  │      7       │  │    6     │  │      5       │  ┌──────────────┐
│              │  │Conduct Review│  │          │  │   Perform    │  │      4       │
│ Approve and  │◀─│  with Exec.  │◀─│Perform Risk│◀│ Acquisition  │◀─│   Develop    │
│Baseline the SAP│ │   Sponsor    │  │Management│  │Strategy and  │  │Business Case │
│              │  │ and Other Team│ │Activities│  │ Soliciation  │  │and Obtain    │
│              │  │   Members    │  │          │  │  Activities  │  │ Funding -    │
└──────────────┘  └──────────────┘  └──────────┘  └──────────────┘  │Follow the IT │
                                                                     │ Investment   │
                                                                     │ Management   │
                                                                     │ Operating    │
                                                                     │ Procedures   │
                                                                     └──────────────┘
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1. Estimate the Planning Effort

At the beginning of the Vision Phase, estimate the number of resources and the amount of time needed to successfully complete acquisition planning activities. Use the Acquisition Planning Estimation Worksheet to complete this step. *See Appendix A*

2. Assign Resources to the Acquisition Effort

Resources to plan and manage the acquisition must be identified. These resources will be involved in the Vision Phase acquisition activities and may continue to participate through out the life cycle of the project.   The designated resources should be documented in the Acquisition Resources section of the System Acquisition Plan. *See Section 3.3*

3. Train Resources as Necessary

The acquiring organization provides experienced system acquisition management personnel to support acquisition planning. Experience means, for example, having participated in system acquisition management planning on at least one project, having a minimum of five years acquisition experience, having knowledge of the system's application domain, and having knowledge of current software engineering processes and technology.   If resources are not trained or experienced, then the project manager must identify appropriate training. This can be documented in the Acquisition Experience and Training section of the System Acquisition Plan. *See Section 3.5*

4. Develop Business Case and Obtain Funding – Follow the IT Investment Management Operating Procedures

In order to obtain funding, the project must follow the IT Investment Management Operating Procedures to ultimately receive approval from the Investment Review Board (IRB). As part of this process, the business case is developed and approved. Sections of the business case are also relevant to acquisition planning. Therefore, several sections of the business case should be incorporated and/or modified for the system acquisition plan. *See Sections 3.1, 3.1.2, 3.6- 3.1.11, 3.13.*

5. Perform Acquisition Strategy and Solicitation Activities

Consider the acquisition strategy for the solution. Request for proposals (RFP), Statement of objectives (SOO), and the Task order (TO) are completed. Refer to the Vision Phase of the SDLC for further description. *See Section 3.2*

6. Perform Risk Management Activities

Note that the IPT is typically formed; once the SOO and Task Order is complete, to assist in project planning and with risk management. The IPT should contain other members of SFA and the contractor teams necessary for the development and delivery of the solution. ***See Section 3.11***

7. Conduct Reviews with Executive Sponsor and Other Team Members

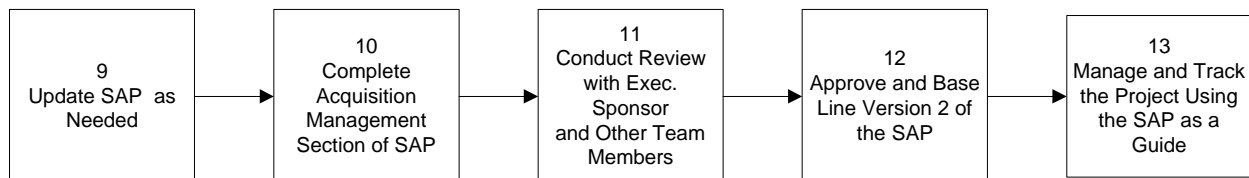The Executive Sponsor and other team members review the first iteration of the system acquisition plan.

8. Approve and Base Line the System Acquisition Plan

The plan is approved and is baselined. The baseline system acquisition plan should include the appropriate areas addressed in the business case, as well as, what is needed to plan for a system acquisition project.

The plan should include:

- Estimate acquisition effort
- Identify acquisition resources
- Plan any needed acquisition training and experience
- Project Budget
- High level milestones
- Acquisition risks
- Acquisition strategy
- The measurements to be used as success criteria for the project

2.5.2 In the Definition Phase

9 Update SAP as Needed	10 Complete Acquisition Management Section of SAP	11 Conduct Review with Exec. Sponsor and Other Team Members	12 Approve and Base Line Version 2 of the SAP	13 Manage and Track the Project Using the SAP as a Guide

9. Update System Acquisition Plan as Needed

Update the system acquisition plan as necessary, based on possible scope, budget, and resource changes. For example, the cost estimates may have changed due to scope changes identified in the high level requirements.

10. Complete Acquisition Management Section of the System Acquisition Plan

The acquisition management activities must be planned early in the Definition Phase. Documentation of the planning can be completed in separate documents or within the Acquisition Management section of the System Acquisition Plan based on the project's complexity. ***See Section 3.12.*** Such planning includes:

- Project Management
- Requirements Development and Management
- Contract Tracking and Oversight
- Evaluation
- Maintenance
- Transition to Support
- Configuration Management
- Quality Assurance

11. Conduct Reviews with Executive Sponsor and Other Team Members
The Executive Sponsor and other team members review the second iteration of the system acquisition plan.   Revisions are noted and once agreed upon are incorporated.

12. Approve and Base Line the 2ⁿᵈ Version of the System Acquisition Plan
The updated version of the plan is approved and is baselined.

13. Manage and Track the Project Using the System Acquisition Plan as a Guide
Once the plan is approved, the IPT and the Project Manager must manage the acquisition based on the plan. Project management functions should be carried out and reviewed periodically. Through project management, monitor the status of the acquisition. Use the measurements defined in the plan to check actual progress.   Did the project meet milestones? Did the project follow the budget? Did the project manage constraints?

2.5.2 In the Construction, Deployment and Support Phase

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Continue to Manage and Track the Project during all of the SDLC Phases
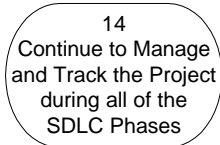
14. Continue to Manage and Track the Project During All of the SDLC Phases
Project management functions should be carried out and reviewed periodically. Through project management, continue to monitor the status of the acquisition. Use the measurements defined in the plan to check actual progress.   Also, update the system acquisition plan throughout the phases as project changes affect the plan. Once the product is delivered, evaluate the final product compared to the baselined system acquisition plan.

3.0   System Acquisition Plan <<Template and Procedure>>

This document is a planning tool to be used by SFA to plan and manage the acquisition of system development projects. System acquisition planning should be reviewed periodically by the acquiring organization and by the project manager.

This plan's purpose is to develop a realistic overall business strategy for managing the acquisition to deliver responsive systems in a timely manner.   This plan incorporates information from the Business Case, as well as, important additional information needed to manage the project. The plan is developed in accordance with the System Development Life Cycle (SDLC), which outlines that the System Acquisition Plan is developed during the Vision Phase and maintained throughout the remaining phases.

<<All bracketed sections of this template should be deleted from the final document. The project's Business Case should be copied into this document to complete the acquisition plan. >>

Project Name:

Channel:

Project Sponsor:

Project Lead:

3.1   Initiative Description

<<Insert from business case. >>
Provide a description of the initiative and rationale for investing in the initiative. This includes a description of the business problem the initiative will address, the scope of the initiative, other areas and processes impacted, what is required to complete the initiative and the timing in which the initiative will be completed. The following questions should be answered:

Describe the need for change (the business problem to be addressed).

What is the purpose of the initiative?

What is the scope of the initiative, including what it is not?

What is the start date and end date of the initiative?

What other business areas/external groups are affected by the implementation of this initiative and how are they affected?

What systems are impacted by the implementation of this initiative and how are they impacted?

What business processes are impacted by the implementation of this initiative and how are they impacted?

3.2 Acquisition Strategy

<<Insert from business case. Add additional information as described below if applicable. >>
<<Describe the acquisition strategy to be used for this acquisition, and the rationale for the strategy. Add subsections as needed, including security requirements, source selection approach, source selection criteria, contract type and terms, the life cycle support approach and other factors that affect the acquisition. Further describe who recommends the acquisition approach, contract type and terms, and applicable quality requirements. This section should also describe who is responsible for the technical evaluations of proposals.

Solicitation
<<Describe who is responsible for the preparation of the Task Order, Statement of Objectives, and Statement of Work. If applicable, describe the responsibilities for a Request for Proposal (RFP), Request for Quotations (RFQ), or Requests for Information (RFI), and other source selection documentation. >>
>>

Sources
<<Indicate the prospective sources of supplies or services that can meet the need of this project. List the most likely offerors for the requirement, and/or the manufacturer and model of the equipment that will most likely be offered. Describe the nature and extent of market research conducted and what were the major findings. If a Modernization Partner project, describe the rationale for acquiring the solution from the Modernization Partner. >>

Competition
<<Describe how competition will be sought, promoted, and sustained throughout the course of the acquisition, including any performance requirements that will be required. Also, address small and/or disadvantaged business considerations. >>

Contract Considerations
<<For each contract contemplated, discuss contract type selection; use of multiyear contracting, options, or other special contracting methods, ex: performance-based. Reconcile these elements to the acquisition risks previously identified. What incentives were considered to motivate superior contract performance? >>

Acquisition Constraints
<< Constraints differ from risks in that they already exist and cannot be changed. For example, risks can be prevented, where constraints are constant to the environment. Constraints can be managed and therefore should be identified to ensure that they are managed throughout the life cycle. >>

The constraints to the system acquisition project are listed below.

Name/Type	Constraint	How will the project team manage this constraint?
Schedule		
Security		
Interdependencies/Compatibility		
Business Areas/ External Groups		
Section 508 Compliance		

3.3 Acquisition Resources

<<List the name, contact details (email, phone, office location) and the organization of the person assigned to each role. All SFA personnel involved in the acquisition of this system should be listed below. This list should be maintained throughout the life cycle of the acquisition. An organization chart can be included. Add any additional roles needed that are not included in the table, and remove any that are not appropriate for this acquisition. >>

The roles and responsibilities involved in the system acquisition are listed below.

Role	Name	Contact Details	Organization
Executive Project Sponsor			
Project Lead			
Information Technology Representative			
Contracting Officer			
Contracting Officer's Technical Representative (COTR)			
Source Selection Authority			
CIO Representative(s)			
Independent Reviewer of the cost and schedule estimate *			
Other (e.g., IPT members, contractor support, subject matter experts)			

* In this instance, "independent reviewer" means a review by an individual(s) other than the author(s) of the cost and schedule estimates.

3.4 Acquisition Planning Effort

<<To determine the effort estimation of the acquisition, refer to the Acquisition Planning Estimation Worksheet in the Appendix A. Ensure that a brief description is included here explaining how the cost was derived and how the estimate was determined. >>

3.5 Acquisition Experience and Training

<< Describe additional training for specialized needs as necessary for managing the acquisition. >>

3.6   Benefits

<<Insert from business case>>
Significant investments should not be undertaken unless they support SFA's goals and objectives.
Provide a narrative discussion to explain why SFA is the doing the initiative and what project objectives
or expected outcomes can be quantified and how can they be measured.

BENEFITS	
Quantified Benefits (e.g., cost reduction)	*Quantified Benefits (e.g., revenue enhancement)*
Reduced FTEs $XXX Operating Expenses $XXX Total: $XXX	
Assumptions	
Benefit 1 assumptions	*Benefit 2 assumptions*

Demonstrate that the initiative supports the goals and objectives of SFA, how it supports these goals and
objectives, to what extent it helps SFA achieve these goals and objectives and when these benefits will be
realized.

Provide a narrative description of the qualitative benefits or expected outcomes of implementing this
initiative.

3.7   Costs

<<Insert from business case>>
Provide a comprehensive list of costs, including those to implement the initiative and the costs to support
it over its useful life.

COSTS			
One-Time Implementation		*On-Going*	
System Development	$XXX	Production Processing	$XXX
Hardware	$XXX	Key Personnel	$XXX
Software	$XXX	Ad-hoc Processing	$XXX
Business Support	$XXX	System Maintenance	$XXX
Other	$XXX	Telecommunications	$XXX
Total	**$XXX**	**Total (per year)**	**$XXX**
Assumptions			

3.8   Budget

<<The following budget should be planned by phase to help estimate the allocation of the budget per phase.   The budget should be monitored throughout the phases. The actual cost should be recorded when the project is complete. These estimates can be derived by using the Cost Estimating Tool in the IT Investment Management Operating Procedures. >>

The estimated budget and the actual amount are listed below.

Deliverable	Total Estimated	Total Actual
Vision Phase Budget	$ XXX	$XXX
Definition Phase Budget	$ XXX	$XXX
Construction Phase Budget	$ XXX	$XXX
Deployment Phase Budget	$ XXX	$XXX
Support Phase Budget	$XXX	$XXX
Grand Total All Deliverables	**$ XXXX**	**$XXX**

3.9   Milestones

<< The following milestones should be planned in accordance with the SDLC. The major milestones should be included in this plan so that they can be maintained throughout the lifecycle of the acquisition at a high level. These milestones are the basis for the WBS (Work Breakdown Structure).   The detailed WBS can be maintained in a scheduling tool. >>

The high level milestones are listed below.

Phase/Task	Milestone Description	Planned Completion Date	Actual Delivery Date
Vision		MM/DD/YY	MM/DD/YY
Definition			
Construction			
Deployment			
Support			

3.10   Technology

<<Insert from business case>>
Discuss the critical technology issues that impact: time to market and total cost of ownership.

Time to Market

What is the degree of complexity in integrating with other systems?

Has this technology been implemented at Education before? If not, is this a proven technology?

Does SFA have the technical expertise to implement this initiative?

Total Cost of Ownership

Does this technology comply with the standard technical architecture of SFA? Education? Federal Government?

What is the level of required enhancement after implementation?

What is the life span of this initiative?

3.11   Risks

<<Insert from business case. Add additional information as described below if applicable. >>
<<Describe the risk management method that will be followed by the project and where the risks will be tracked to closure. Be sure to include cost and schedule risks, if not included in the Business Case. >>

Risk	Description of Risk	Mitigation Strategy
Financial		
Technology		
Scope		
Management		
Exposure		

3.12 Acquisition Management

<<Describe how the following sections will be implemented based on guidance defined in the SDLC. A separate plan can be referenced in place of or to further explain each of the following sections based on the project's complexity. These areas include pre-award and post award activities. >>

Project Management
<<The project management planning includes how project issues, status, execution, funding, and expenditures are tracked and managed. >>

Contract Tracking and Oversight
<<Define what contractor plans and control system will be required and how they will be reviewed. Further describe how corrective actions will be tracked to closure. This section should also include a description of the steps required to close out the contract. >>

Requirements Development and Management
<<Describe how software acquisition requirements will be developed and maintained. Briefly explain how the high-level technical and non-technical contract requirements will be defined. Further describe the peer review process to ensure that the requirements are correct, complete, consistent, clear, verifiable and feasible.   Define responsibility for developing and maintaining a traceability matrix. Further describe how requirements changes will be controlled – a step that is part of the CM effort. Identify procedures for conducting impact analysis of new or changed requirements, including performance, cost and schedule. Lastly, define the status reporting procedures for on-going status of the requirements baseline and changes to the baseline during project execution. >>

Configuration Management
<<Refer to the project's Configuration Management Plan (file location). >>

Quality Management
<< Refer to the project's Quality Management Plan (file location). >>

Evaluation
<<Define tasks, activities, resources and critical dependencies involved in the Evaluation process. Evaluation provides evidence that the evolving systems products and services satisfy contract requirements prior to acceptance and transition to support. >>

Transition to Support
<<Describe the transition to support activities. Describe the preparation for the transition, including any necessary coordination with the customer and/or the support organization. Describe how the readiness to accept the product will be confirmed. Maintenance, as a project cost, is to be identified and planned early in the acquisition process in order to ensure that the necessary funds are budgeted and available for post-delivery product maintenance >>

3.13   Measurements

<<Describe the management measures to be collected and the verification process. The process should work in conjunction with the IT Investment Operating Procedures. The acquisition team should indicate how often the measures would be monitored. >>

Effort, cost, milestones and deliverable status will be measured for this project.

Effort: Overall acquisition planning effort can be measured in the Acquisition Planning Estimating Worksheet *(Appendix A)*. This measure is designed to assess the productivity of individual processes. It can also identify processes that are performing worse or better than expected. The aim is not to focus solely on the speed of completing the deliverable; rather it is to strike a balance between quality of the deliverable and the effort expended in producing it. Tracking activity can dramatically reduce costs. This measure will be tracked on *<regular>* basis at the acquisition team status meeting.

Costs: This measure's purpose is to track actual costs against baseline costs throughout the life cycle – from planning to maintenance. The main benefit is the ability to predict total cost overrun / under run. Refer to the Costs and Budget sections of this plan.   In the absence of actual costs, estimates may be substituted. This measure will be tracked on *<regular>* basis at the acquisition team status meeting.

Milestones: This is a measure for deriving the earned value from the planning effort. It quantifies the time differential between deliverable sign off and the original plan. Value will not be earned until all tasks within the activity are completed. Refer to the Milestones section of this plan to track high-level milestones. This measure is tracked on *<regular>* basis at the acquisition team status meeting.

Deliverable Status: This measure tracks a deliverable's progress throughout its development, from 1) Not Started, 2) In Progress, 3) In Review, 4) In Rework, 5) Awaiting Sign Off, to 6) Signed Off.   This measure allows for a better understanding of process bottlenecks. This measure is tracked in the Work Breakdown Structure (WBS). See example in the SDLC appendix. This measure is tracked on *<regular>* basis at the acquisition team status meeting.

4.0   Document History

All revisions made to this document are listed here in chronological order.

Version Number	Date Modified	Name	Description

5.0   Appendix A

5.1   Acquisition Planning Estimation Worksheet And Procedure